

REMARKS

Reconsideration of the above-identified application in view of the amendments above and the remarks following is respectfully requested.

Claims 1, 3, 6, 7, 9, 10, 14-18, 23-30, 32, 35, 36, 38, 39, 43-47 and 52-57 have been rejected under 35 U.S.C § 103 as being unpatentable over Heddaya et al. (U.S. patent 6,622,157) in view of Cieslak et al. (U.S. 6,240,461).

Claims 2, 4, 5, 8, 12, 31, 33, 34, 37, and 41 have been rejected as being unpatentable over Heddaya and Cieslak in view of what is "obvious in the art".

Claim 13 has been rejected as being unpatentable over Heddaya and Cieslak in further view of Wexler et al. (US patent 6,286,084)

Claims 11, 19-22, 40, and 49-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heddaya and Cieslak in further view of Antonov (US patent 5,884,046).

While continuing to traverse the Examiner's rejections, and without in any way prejudicing the patentability of the rejected claims, the Applicant has, in order to expedite the prosecution, chosen to amend the claims thereby rendering moot Examiner's rejection.

Claims 1-28, 30-47 and 49-60 are hereby canceled without prejudice and are replaced by new claims 61-80.

Amendments to the Specification

Applicants hereby amends application in accordance to statutory requirement under 35 U.S.C. 119(e) that Applicant insert a reference to Applicant's provisional patent application.

The Applicant wishes to correct a number of minor errors that occurred in the specification. Particularly, the words "widely recognized" have been removed from the background section and the word "area" was corrected.

The References and Differences of the Prior Invention Thereover:

Applicant respectfully acknowledges the claim interpretation of Examiner in paragraph 3 , Office Communication mailed on September 2, 2004, and paragraphs 32-34 of the present Office Communication. Claims 61-80 have been narrowed in scope and clarify the term “client-to-client” network or “peer-to-peer” network in the context of the present invention.

Prior to discussing the claims, Applicant will first discuss the references of the prior art of record and the novelty of the present invention and its unobviousness over the references.

By way of introduction, Applicant respectfully affirms that there is a fundamental difference between a client-server network, and client-to-client network in the context of the present invention as amended herein. In a client-to-client network in the context of the present invention as amended herein, each document is divided into pieces and spread across multiple clients located at many nodes of the network. All the pieces of the document must be assembled or *aggregated* from individual clients, each client storing only a portion of the document, in order to reconstruct a copy of the document. The present invention as amended herein includes an acceleration server for client-to-client networks only in this context.

Heddaya et al. do not describe a client-to-client network according to the present invention as amended herein. They describe a network with “intermediate nodes” and “mobile agents” that service the requests (Heddaya, col. 8, lines 55-60). Client nodes themselves in Heddaya’s disclosure do not service requests and thus Heddaya’s disclosure does not function in a client-to-client network according to the present invention.

According to Heddaya “*each document typically has an address by which it can be referenced*” (Heddaya, col. 1, lines 35-40). This is not the case with client-to-client networks of the present invention, and *aggregation* is required to compile the document from bits and pieces in a client-to-client network, a step which Heddaya doesn’t disclose or even suggest. Referring to Heddaya , “*The response 200 includes the copy 202 of the document stored at the secondary node 174 to provide a response 200 to the second client node 182*”. (column 11 lines 18-20) It is clear that the invention of Heddaya is not capable of nor require any *aggregation* whatsoever, and

thus is “inoperable” in a client-to-client network in the context of the present invention. With regard to paragraph 34, of the present office communication, Applicant respectfully submits that Heddaya when he mentions “equally applicable to peer-to-peer networks”, they are referring to such a network as described by Examiner in paragraph 32 of the present communication which is not at all similar to “client-to-client” network in the context of the present invention as amended herein.

Cieslak et al. teach methods for caching network data traffic. The disclosure of Cieslak, similar to Heddaya, teaches a method caching in a client/server network, not in a client-to-client network in the context of the present invention. In Cieslak, each “object” has a single address and a single destination.(for instance Figure 2 and description, column 4 lines 55-65) Cieslak doesn't disclose or suggest an “object” divided into portions among clients, nor does Cieslak suggest *aggregating* portions of an object to provide a response to a request nor would such a teaching be “operable” in the context of Cieslak.

Similarly, Applicant has carefully reviewed all prior art of record none of which are relevant at all to “client-to-client networks” in the context of the present invention according to new claims 61-80 herein.

Independent Claims 61, 75, and 80

Independent claims 61, 75, and 80 include novel physical features or steps. Specifically, *intercepting response portions from the other clients* and “*aggregating the response portions into the response*” are novel features when “*performed in an acceleration server*” attached to the client-to-client network. Prior art servers do not “*intercept response portions*” and aggregate them into responses.

The new claims are fully supported by the specification and new matter has not been added in the present amendment. The term “*aggregating*” has been introduced having a common definition of the term meaning “collecting” as from “*two distinct clients*”. The “*aggregation*” limitation is supported in the following passages from the specification:

According to still further features in the described preferred embodiments the step of transmitting the intercepted responses to clients submitting intercepted queries includes simultaneous transmission of portions of a *single data set from at least two of the acceleration servers*. (page 6 lines 6-9)

According to still further features in the described preferred embodiments the specific client which contains data equivalent to the specific intercepted response in a directory thereof includes *at least two separate and distinct clients*.

(page 6 lines 16-19)

According to still further features in the described preferred embodiments the step of storing the intercepted responses in an acceleration server includes *storing a single intercepted response which originates in at least two separate and distinct clients*.

(page 6 lines 20-24)

and

In some cases, the step of storing 24 the intercepted responses in an acceleration server may include storing 24 a single intercepted response which originates *in at least two separate and distinct clients*.

(page 14 lines 5-7)

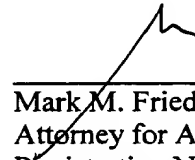
Novel physical features of Independent claims 61, 75, and 80

Produce New and Unexpected Results

In a client-to-client network in which large files divided up and stored in part by a large number of clients, a single query for a file may result in hundreds or even thousands of connections. As a result many such simultaneous queries may overload the connection capacity at certain nodes of the wide area network, such as at Internet service providers. Furthermore, by *aggregating* the response at the acceleration server rather than at the conventional clients of the network, the peer to peer traffic is much more efficient. At the date of the present invention, peer to peer traffic was not common and consequently the excessive burden that this type of traffic carries was *unrecognized*. Furthermore, the method of the present invention uses a new principle of operation by *intercepting* specifically peer to peer traffic such as by redirecting the traffic away from nodes passing heavy traffic, *e.g* conventional cache servers, rather than adding extra servers in parallel to handle the excessive traffic.

In view of the above amendments and remarks it is respectfully submitted that independent claims 61, 75, and 80 claims dependent therefrom are in condition for allowance. Prompt notice of allowance is respectfully and earnestly solicited.

Respectfully submitted,



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Date: Jul 17, 2005